

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of receiving transmitted ~~communicating~~ digital data in a receiver, comprising the steps of,
cyclically transmitting frames comprising:
a first number of symbols according to a first keying mode using a first constellation; [[,]]
a second number of symbols according to a second keying mode using a second constellation, whereby the first constellation includes more signaling points than the second constellation; and [[,]]
the first and second keying modes being used at predetermined positions in the frame, whereby both the symbols according to the first and second keying mode carry information under at least an operative traffic phase; and
applying a weighting function in the receiver to an error control signal for symbols coded according to the first keying mode, wherein the error signal is reduced when the detected signal approaches decision boundaries of the first keying mode; and
subduing responses outside the detector boundaries of the given detected symbol of the first keying mode, wherein no weighting function is applied to symbols associated with the second keying mode.
2. (Previously Presented) The method according to claim 1, wherein the number of symbols sent under the second keying mode in a frame amounts to 1.
3. (Previously Presented) The method according to claim 1, wherein the second constellation is a subset of the first constellation.

4. (Previously Presented) The method according to claim 1, wherein the second constellation comprises at least two signaling points.

5. (Previously Presented) The method according to claim 1, wherein 1 symbol out of 5-20 in a frame B is modulated according to the second keying mode.

6. (Currently Amended) The method according to claim 1, wherein 1 symbol out of 20-100 in a frame [[B]] is modulated according to the second keying model.

7. (Currently Amended) The method according to claim 1, further comprising the step of inserting periodically a frame alignment word after a plurality of frames is transmitted, the alignment word comprising a sequence of predetermined symbols, ~~wherein a frame alignment word comprising a sequence of predetermined symbols, is inserted periodically after a plurality of frames is being transmitted.~~

8. (Currently Amended) The method according to claim 7, wherein a frame alignment word is inserted for every 1000-10,000 ~~4000-40,000~~ symbols.

9. (Currently Amended) The method according to claim 2, wherein during reception,

for each incoming frame, ordering incoming symbols according to their position in the frame,

assigning each incoming symbol to a given field of a register having a number of fields, the number of fields corresponding to the number of symbols in the frame, whereby each field comprises a cumulative value, and whereby a symbol of a given frame position is assigned a field of a corresponding order number,

updating the cumulative value of the given field in the register with a first value if the respective symbol belongs to the second constellation, otherwise updating the respective field with a second value,

performing updates of multiple incoming frames of symbols,
from the accumulative values of the respective fields establishing at which
positions in the incoming frame the first, respectively the second, keying mode is used.

10. (Currently Amended) The method according to claim 7, wherein the
frame alignment word indicates which one of a predetermined group of insertion rates is
used after the frame alignment word, ~~the~~ an insertion rate pertaining to a predetermined
rate of symbols being inserted according to the second keying order mode in relation to
the symbols of the first keying order mode, ~~is used after the frame alignment word~~.

11. (Currently Amended) The method according to claim 10, wherein the
insertion rate depends on the given channel conditions ~~which applies for the channel~~.

12. (Currently Amended) The method according to claim 11, wherein ~~the~~
a measured bit error rate at the receiver is used to decide which insertion rate is used
for modulation.

13. -14 (Canceled)

15. (Previously Presented) The method according to claim 14, wherein a
parabolic weighting function is utilized inside the decision boundaries of the first keying
mode.

16. (Canceled)

17. (Previously Presented) The method according to claim 1, wherein the
method is used in combination with forward error correction coding.